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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,083	02/11/2002	Sean Timoney	1817-0120P	1531
2292	7590	01/05/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SPISICH, GEORGE D	
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/071,083

Applicant(s)

TIMONEY ET AL.

Examiner

George D. Spisich

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 7-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Species A in Figures 1-3 with traverse in Paper No. 7 is acknowledged. Examiner maintains that the election was proper and the species listed are patentably distinct. Further, as addressed in the previous Office Action, should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention. Claims 1-6 and 16 read on the elected Species A shown in Figures 1-3. Claims 7-15 have been withdrawn from consideration as they relate to non-elected species.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the compensating

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spring being an elastic element of solid material (as claimed in claim 3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 2 and 16 are objected to because of the following informalities:

In claims 2 and 16, lines 7 and 9 (of both), there is claimed "the inner end" in line 7 and "the outer end" in line 9. The language "the inner end" should be replaced with - - the inner ends each - - since there are a plurality of inner (and outer) ends. The same correction should be made with respect to "the outer end".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller et al. (USPN 4,478,431).

Muller et al. disclose a suspension system for a vehicle including a hydro-pneumatic spring for supporting a wheel on a vehicle body. Muller et al. disclose a compensation spring (18) which is provided by a coil spring located within the hydro-pneumatic spring and the spring being operable to act in opposition to the force exerted by the hydro-pneumatic spring as the hydro-pneumatic spring approaches full extension.

The hydraulic working fluid (see col. 4, line 65) is oil. The hydro-pneumatic spring has an oil chamber below element (16) (shown in Fig. 5) and associated gas chamber above element (16). There is a separator piston or membrane (16) between the chambers, and the spring (18) acts to reduce the force exerted by the separator piston or membrane on the oil in the oil chamber when viewed in operational relation to the force that is exerted on the element (16) by the element (11') compressing the oil.

With respect to claim 3, the compensating spring (18) of Muller et al. is an elastic element of solid material.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Carr (USPN 3,966,223).

Carr discloses (as shown in Figure 8) a suspension system for a vehicle including a means for supporting a wheel on a vehicle body, with the supports means including a hydro-pneumatic spring, and a compensating spring (32a) associated with

the hydro-pneumatic spring. The compensating spring is an elastic element of solid material. The compensating spring is operable to act in opposition to the force exerted by the hydro-pneumatic spring as the hydro-pneumatic spring approaches full extension.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori (USPN 5,513,874) in view of Muller et al. (USPN 4,478,431)

Mori discloses a vehicle suspension system having an upper control arm (3) and a lower control arm (4). The inner ends of the control arms are connected to the vehicle body by an articulated joint (14, 15) and the outer ends of the control arms are connected to the wheel assembly by an articulated joint (12, 16). Mori shows a spring element having an upper and lower end and the upper end is attached to the vehicle body and the lower end being attached to one of the upper and lower control arms.

However, Mori does not disclose that the spring element in the suspension system is a hydro-pneumatic spring with an internal spring compensating means.

Muller et al. as discussed in a prior rejection discloses a hydro-pneumatic spring with an internal spring compensating means.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the suspension arrangement of Mori by substituting it's existing spring element for the hydro-pneumatic spring of Muller et al. so as to provide enhanced spring characteristics to the vehicle suspension.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gatter et al. (USPN 5,215,327), Marking (USPN 6,311,962), Margolis et al. (USPN 5,570,286), Vignocchi et al. (USPN 6,260,832), Sugahara (USPN 4,907,495), Simons (USPN 4,807,860), Shinbori et al. (USPN 4,720,085), Hiruma (USPN 3,941,403), JP 55-63912, EP 0 352 181.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (703) 305-6495. The examiner can normally be reached on Monday to Friday 6:00-3:30 except alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9326.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-1113.

Gds  
December 21, 2003

  
PAUL N. DICKSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600  
12/22/03